

Appln No. 09/804,877  
Reply to Office Action dated December 13, 2004

SAR 14211

### **REMARKS**

This is intended as a full and complete response to the Office Action dated December 13, 2004 having a shortened statutory period for response set to expire on March 13, 2005. In the Office Action, the Examiner noted that claims 1 to 25 are pending in the application, and that claims 1-5 and 10 are rejected. The Examiner objected to claims 6-9 as being dependent from a rejected base claim. Claims 11-25 are allowed. In view of the above amendments and the following discussion, Applicants submit that none of the claims now pending in the application are obvious under the provisions of 35 USC § 103. Thus Applicants believe that all of these claims are now in condition for allowance.

#### **I. REJECTION OF CLAIMS UNDER 35 USC §103**

The Examiner rejected claims 1-5 and 10 as being obvious over Eroz et al., (United States patent 6,430,722 B1, issued August 6, 2002, hereinafter called "Eroz") in view of Rowitch et al ("On performance of hybrid FEC/ARQ systems using rate compatible punctured Turbo (RCPT) codes", IEEE, June 2000) (Rowitch). The rejection is respectfully traversed.

Eroz discloses a method of providing forward error correction for data services using a parallel concatenated convolutional code which is a Turbo Code comprising a plurality of constituent encoders wherein a plurality of data block sizes are used in conjunction with said Turbo Code.

Rowitch discloses a hybrid forward-error correction/automatic repeat-request (ARQ) system that employs rate compatible punctured turbo (RCPT) codes to achieve enhanced throughput performance over a nonstationary Gaussian channel. (See Rowitch, Abstract)

The Examiner's attention is directed to the fact that Eroz and Rowitch fail to disclose "adjusting, in response to a channel quality measure of an information channel, the number of error correcting bits to generate said puncture coded signal from said channel code signal", as recited in claim 1. Specifically Applicants' claim 1 positively recites:

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1. A method for producing a puncture coded signal from a data signal, where the data signal comprises a sequence of data blocks, said method comprising:  
generating a channel coded signal from the data signal, where said channel coded signal has, for each data block in said sequence of data blocks, a number of bits equal to a number of bits in a particular data block plus an initial number of error correcting bits; and  
adjusting, in response to a channel quality measure of an information channel, the number of error correcting bits to generate said puncture coded signal from said channel coded signal. (emphasis added)

Eroz selects turbo codes based on a best overall BER performance. A single mother Turbo Code and various puncturing patterns are sought to derive uniformly good codes for various code rates and information block sizes. (col. 7, lines 30-33) In other words, Eroz uses BER/FER as a measure of determining the Turbo Code having the best performance for a specific application (see col. 10, lines 16-56). Eroz only teaches a method of selecting a best Turbo Code. Applicants' claims recite a method of adjusting the number of error correcting bits. Selecting particular Turbo Codes is not equivalent to adjusting error correcting bits as recited by Applicants' claims.

The Examiner concedes that Eroz fails to disclose that the channel coded signal has for each data block a number of bits equal to a number of bits in a particular data block plus an initial number of error correcting bits. Rowitch is cited by the Examiner in order to cure the Examiner's concession with respect to Eroz.

Rowitch, like Eroz, fails to disclose "adjusting, in response to a channel quality measure of an information channel, the number of error correcting bits to generate said puncture coded signal from said channel code signal". In fact both Eroz and Rowitch are devoid of the suggestion to adjust the number of error correcting bits in response to a channel quality measure of an information channel. As such, Eroz in view of Rowitch fails to render Applicants' claim 1 obvious. Claims 2-5 and 10 are patentable at least by virtue of their dependence from claim 1.

## II. Allowable Subject Matter

Applicants thank the Examiner for allowing claims 11-25. Claims 6-9 were objected to as being allowable but depending from a rejected base claim. Applicants

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thank the Examiner for indicating the conditional allowability of such subject matter, but have hereinabove provided arguments refuting the rejections of the independent claims. Thus, no changes to dependent claims 6-9 are made at this time.

### **III. Priority Claim Rejection**

The Applicants agree with the Examiner's finding that the priority claim to provisional application 60/206,133 was vacated by a July 2, 2001 preliminary amendment. Responsive to the Examiner's assertion of a defective oath, the Applicants' representative will contact the inventor so that a new declaration may be provided.

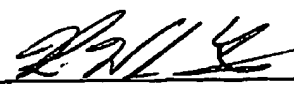
### **CONCLUSION**

Thus, Applicants submit that none of the claims presently in the application are obvious under the provisions of 35 U.S.C. §103. Consequently, Applicants believe that all claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring the maintenance of the present adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Kin-Wah Tong, Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

2/14/05  
Date

  
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